

**MINOR SOURCE OPERATING PERMIT
And Certificate of Operation**

**CITY OF EVANSVILLE
ENVIRONMENTAL PROTECTION AGENCY**

And

**INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT
OFFICE OF AIR QUALITY**

**Hard Chrome
510 Dresden
Evansville, Indiana 47710**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of MCE 3.30 and 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 163-11753-00152	
Issued by: Dona J. Bergman, Director City of Evansville, EPA	Issuance Date: March 15, 2002

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary chromium electroplating source.

Authorized Individual: Bob Oglesby
Source Address: 510 Dresden, Evansville, IN 47710
Mailing Address: 510 Dresden, Evansville, IN 47710
Phone Number: 812-422-2855
SIC Code: 3471
County Location: Vanderburgh
County Status: Attainment area for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

One (1) Hard Chromium Electroplating Operation with a maximum cumulative rectifier capacity of 288,120,000 Ampere-hours consisting of:

Ten (10) hard chromium electroplating tanks, identified as Tanks #s 1 (Rectifier 14: 2000 amps), 2 (Rectifier 15: 3000 amps), 3 (Rectifier 4: 8000 amps and Rectifier 5: 10,000 amps), 4 (Rectifier 6: 10,000 amps and Rectifier 7 8000 amps), 5 (Rectifier 8: 8000 amps), 6 (Rectifier 9: 10,000 amps), 7 (Rectifier 12: 8000 amps), 8 (Rectifier 13: 8000 amps), 9 (Rectifier 11: 8000 amps), and 10 (Rectifier 10: 8000 amps), equipped with two (2) packed bed scrubbers and one composite mesh pad scrubber. Tanks 3 and 4 exhaust to PBS #1 and tanks 1, 2, 5, 6, 7, 8, 9, and 10 exhaust to PBS #2. Both packed bed scrubbers exhaust to the common composite mesh pad.

One (1) Bryant natural gas boiler rated at 1.56 mmbtu/hr

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated there under, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

Entire Source

C.1 PSD and Emission Offset Minor Source Status [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year and the potential to emit of VOC and NOX are less than 25 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 2-3 (Emission Offset) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit of VOC or NOX to 25 tons per year, 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ AND EVANSVILLE EPA prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, and City of Evansville EPA upon request and shall be subject to review and approval by IDEM, OAQ and City of Evansville EPA. IDEM, OAQ, and City of Evansville EPA may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be Submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

AND

City of Evansville Environmental Protection Agency
101 Court Street
Riverside One Bldg. Suite 205
Evansville, IN 47708

Any such application should be certified by the “authorized individual” as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ AND EVANSVILLE EPA, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ AND EVANSVILLE EPA, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ AND EVANSVILLE EPA, nor an authorized representative, may disclose the information unless and until IDEM, OAQ AND EVANSVILLE EPA, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAQ AND EVANSVILLE EPA, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, and City of Evansville EPA within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) City of Evansville EPA, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

AND

City of Evansville Environmental Protection Agency
101 Court Street
Riverside One Bldg. Suite 205
Evansville, IN 47708

at least sixty (60) days before the intended test date for all chromium electroplating facilities and no later than thirty-five (35) days prior to the intended test date for all other facilities. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two (2) weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C – Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, and City of Evansville Environmental Protection Agency within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAQ), EEPA or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and EEPA, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If, for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.14 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, or EEPA representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

AND

City of Evansville Environmental Protection Agency
101 Court Street
Riverside One Bldg. Suite 205
Evansville, IN 47708

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee’s failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.16 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality and EEPA stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

AND

City of Evansville Environmental Protection Agency
101 Court Street
Riverside One Bldg. Suite 205
Evansville, IN 47708

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and EEPA on or before the date it is due.

Emissions Unit Description:

The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.

One (1) Hard Chromium Electroplating Operation with a maximum cumulative rectifier capacity of 288,120,000 Ampere-hours consisting of:

Ten (10) hard chromium electroplating tanks, identified as Tanks #s 1 (Rectifier 14: 2000 amps), 2 (Rectifier 15: 3000 amps), 3 (Rectifier 4: 8000 amps and Rectifier 5: 10,000 amps), 4 (Rectifier 6: 10,000 amps and Rectifier 7 8000 amps), 5 (Rectifier 8: 8000 amps), 6 (Rectifier 9: 10,000 amps), 7 (Rectifier 12: 8000 amps), 8 (Rectifier 13: 8000 amps), 9 (Rectifier 11: 8000 amps), and 10 (Rectifier 10: 8000 amps), equipped with two (2) packed bed scrubbers and one composite mesh pad scrubber. Tanks 3 and 4 exhaust to PBS #1, tanks 1, 2, 5, 6, 7, 8, 9, and 10 exhaust to PBS #2. Both packed bed scrubbers exhaust to the common composite mesh pad.

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1][40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10. A copy of this rule is attached. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)][40 CFR 63.343(a)(1)&(2)][326 IAC 20-8-1] [326 IAC 2-6.1-5(a)(2)]

- (a) The emission limitations in the condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
- (b) The hard chromium electroplating tanks, identified as Tanks # 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10 above, are considered a large, existing hard chromium electroplating operation. During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tanks by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm [6.6×10^{-6} gr/dscf].
- (c) Pursuant to 40 CFR 63.343(c)(1)(ii), when using a composite mesh-pad system to comply with the limit specified in this condition, the Permittee shall monitor and record the pressure drop across the composite mesh-pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.

- (d) Pursuant to 40 CFR 63.343 (c)(2)(ii), when using a packed-bed scrubber to comply with the limit specified in this condition, the Permittee shall monitor and record the velocity pressure at the inlet to the packed-bed scrubber system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the scrubber system shall be within ± 10 percent of the velocity pressure value established during the initial performance test, and within ± 1 inch of the water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.

D.1.4 Work Practice Standards [40 CFR 63.342 (f)][326 IAC 20-8-1]

The following work practice standards apply to tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, including the packed-bed scrubbers and the composite mesh pad system and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ and Evansville EPA, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ and Evansville EPA may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAQ and Evansville EPA finds that the plan:
 - (1) Does not address a malfunction or period of excess emissions that has occurred;
 - (2) Fails to provide for the operation of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the packed-bed scrubbers, or the composite mesh pad system and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
 - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, packed-bed scrubbers, monitoring equipment or other causes of excess emissions as quickly as practicable.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

D.1.5 Preventative Maintenance Plan [326 IAC 1-6-3]

A Preventative Maintenance Plan (PMP), in accordance with Section B-Preventative Maintenance Plan, of this permit, is required for the tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 and the packed-bed scrubbers.

D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)] [326 IAC 20-8-1]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the packed-bed scrubbers, the composite mesh pad system and monitoring equipment shall include the following elements:
- (1) For the composite mesh-pad system (CMP):
 - (A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
 - (B) Quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
 - (C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.
 - (D) Perform washdown of the composite mesh-pads in accordance with manufacturers' recommendations.
 - (2) For the packed-bed scrubber (PBS):
 - (A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
 - (B) Quarterly visual inspections of the back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - (C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.
 - (D) Add fresh makeup water to the top of the packed bed if greater than 50% of the scrubber water is drained.
 - (3) A standardized checklist to document the operation and maintenance criteria for tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the air pollution control device, the add-on air pollution control device and the monitoring equipment.
 - (4) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions are indicated by monitoring data do not occur.
 - (5) A systematic procedure for identifying malfunctions and periods of excess emissions of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10; packed bed scrubber #1, packed

bed scrubber # 2 and the composite mesh pad; and for implementing corrective actions to address such malfunctions and periods of excess emissions.

- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time of the plan initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10; packed bed scrubber #1, packed bed scrubber # 2 and the composite mesh pad, during similar malfunction or period of excess emissions events, and program for corrective action for such events.
- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ and Evansville EPA.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM OAQ or Evansville EPA for the life of the tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 and packed bed scrubber #1, packed bed scrubber # 2 and the composite mesh pad or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAQ or Evansville EPA for a period of five (5) years after each revision to the plan.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.7 Performance Testing [326 IAC 2-1.1-11]

- (a) A performance test demonstrating initial compliance for tanks, 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 was performed on June 16, 1997. It was determined that the average pressure drop across the composite mesh pad system was 1.00 inches of water and the average outlet chromium concentration is 0.0031 mg/dscm. Also during that test, it was determined that the average pressure drop across the pack bed scrubber system 1(PB1) was 1.73 inches of water and for the pack bed scrubber system 2 (PB2) was 1.7 inches of water with total chromium concentration not exceeding 0.015 mg/dscm. The inlet velocity is 710 fpm and 800fpm respectively.
- (b) The Permittee is not required to further test tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 by this permit. However, the IDEM may require testing when necessary to determine if the tank 1-10 are in compliance. If testing is required by the IDEM, compliance with the limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C.9 - Performance Testing.
- (c) Any change, modification, or reconstruction of the tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the packed-bed scrubbers, the composite mesh pad system monitoring equipment or monitoring equipment may require additional performance testing conducted in

accordance with 40 CFR 63.344 and Section C.9 - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6. These records shall be maintained in accordance with Section C.14 - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the two (2) packed bed scrubbers and one composite mesh pad scrubber and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.6 and D.1.7 have taken place. The record can take the form of a checklist and should identify the following:
 - (1) The device inspected;
 - (2) The date of inspection;
 - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
 - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the two (2) packed bed scrubbers and one composite mesh pad scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 the two (2) packed bed scrubbers and one composite mesh pad scrubber and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10, the two (2) packed bed scrubbers and one composite mesh pad scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.8(b), of each tank, during the reporting period.

- (k) Records of the actual cumulative rectifier capacity of each hard chromium electroplating tank expended during each month of the reporting period, and the total capacity expended to date for a reporting period.
- (l) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D. 1. 10.

D.1.9 Reporting Requirements [326 IAC 3-6-4 (b)][40 CFR 63.344(a), 63.345 & 63.347][326 IAC 20-8-1]

The notification and reports required in this section shall be submitted to EEPA and IDEM, OAQ using the addresses specified in Section C – General Reporting Requirements.

- (a) Notifications:
 - (1) Initial Notifications
The Permittee shall notify EEPA and IDEM, OAQ in writing that the source is subject to 40 CFR Part 63, Subpart N. The notification shall be submitted no later than one hundred eighty (180) days after the compliance date and shall contain the information listed in 40 CFR 63.347 (c)(1).
 - (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
 - (A) The NCS shall be submitted to EEPA and IDEM, OAQ and shall list, for each tank, the information identified in 40 CFR 63.347 (e) (2).
 - (B) The NCS for tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 was submitted to IDEM, OAQ.
 - (3) Notification of Construction or Reconstruction
Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or reconstruct tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ.
 - (A) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).
 - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
 - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 serves as this notification.

- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from EEPA and IDEM, OAQ before construction, modification, or reconstruction may commence.
- (b) **Performance Test Results**
The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.
- (c) **Ongoing Compliance Status Report**
The Permittee shall prepare summary reports to document the ongoing compliance status of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 are located at a site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAQ and EEPA upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
 - (A) The first report shall cover the period from the issuance date of this permit to December 31 of the year in which the emissions units begin operation.
 - (B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.
- (2) If both of the following conditions are met, semiannual reports shall be prepared and submitted to EEPA and IDEM, OAQ:
 - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or
 - (B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

- (3) IDEM, OAQ or EEPA may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

MALFUNCTION REPORT
EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY
FAX NUMBER – 812-435-6155
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES ?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100 TONS/YEAR CARBON MONOXIDE?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y N

COMPANY: Hard Chrome PHONE NO. : 812-422-2356

LOCATION: (CITY AND COUNTY) Evansville / Vanderburgh

PERMIT NO. 163-11753 AFS PLANT ID: 163-00152 AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: _____/_____/20 _____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE _____/_____/20 _____ _____ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS: _____

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY
AND
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

**CHROMIUM ELECTROPLATING NESHAP
ONGOING COMPLIANCE STATUS REPORT**
(Complete this form for each affected tank)

Source Name: Hard Chrome
Source Address: 510 Dresden, Evansville, Indiana 47710
Mailing Address: 510 Dresden, Evansville, Indiana 47710
MSOP No.: 163-11753-00152
Tank ID #: _____
Type of process: Hard
Monitoring Parameter: Surface tension of the electroplating bath
Parameter Value: 45 dynes per centimeter
Limits: Total chromium concentration may not exceed 0.015 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating NESHAP only.
The frequency for completing this report may be altered by the IDEM, OAQ, Compliance Branch.

Complete this report no later than 30 days after the end of the reporting period , and retain of site unless otherwise notified.

This form consists of 2 pages

Page 1 of 2

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:

TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:

MAJOR AND AREA SOURCES: CHECK ONE

NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.

THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:

IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:

LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

**CHROMIUM ELECTROPLATING NESHAP
ONGOING COMPLIANCE STATUS REPORT**

ATTACH A SEPARATE PAGE IF NEEDED

Page 2 of 2

IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, PROVIDE AN EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKEN FOR THAT EVENT:

DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE LAST STATUS REPORT:

ADDITIONAL COMMENTS:

ALL SOURCES: CHECK ONE

I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY
AND
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name: Hard Chrome
Address: 510 Dresden
City: Evansville, Indiana 47710
Phone #: 812-422-2356
MSOP #: 163-11753-00152

I hereby certify that Hard Chrome is

still in operation.

☐ no longer in operation.

I hereby certify that Hard Chrome is

☐ in compliance with the requirements of
MSOP 163-11753-00152

☐ not in compliance with the requirements of
MSOP 163-11753-00152.

Authorized Individual (typed): Bob Oglesby
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the
Technical Support Document for Minor Source Operating Permit

**Hard Chrome
510 Dresden, Evansville, IN 47710**

MSOP 163-11753, Plt ID 000152

On February 8, 2002, the Evansville Environmental Protection Agency (EEPA) had a notice published in the Courier Press, Evansville, Indiana, stating that Hard Chrome had applied for a Minor Source Operating Permit to operate a chromium electroplating facility. The notice also stated that EEPA proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The EEPA and the Indiana Department of Environmental Management (IDEM) have decided to make the following changes:

Change 1:

Section D.1 has been changed as follows:

Ten (10) hard chromium electroplating tanks, identified as Tanks #s 1 (**Rectifier 14: 2000 amps**), 2 (**Rectifier 15: 3000 amps**), 3 (**Rectifier 4: 8000 amps and Rectifier 5: 10,000 amps**), 4 (**Rectifier 6: 10,000 amps and Rectifier 7 8000 amps**), 5 (**Rectifier 8: 8000 amps**), 6 (**Rectifier 9: 10,000 amps**), 7 (**Rectifier 12: 8000 amps**), 8 (**Rectifier 13: 8000 amps**) , 9 (**Rectifier 11: 8000 amps**), and 10 (**Rectifier 10: 8000 amps**), equipped with two (2) packed bed scrubbers and one composite mesh pad scrubber. **Tanks 3 and 4 exhaust to PBS #1, tanks 1, 2, 5, 6, 7, 8, 9, and 10 exhaust to PBS #2. Both packed bed scrubbers exhaust to the common composite mesh pad.**

Change 2:

Section D.1.6(a) has been changed as follows:

(a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10, the packed-bed scrubbers, the composite mesh pad system **and** monitoring equipment ~~and~~ shall include the following elements:

Change 3:

Section D.1.6(a)(5) has been changed as follows:

A systematic procedure for identifying malfunctions and periods of excess emissions of tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10; ~~the air pollution control device, the add-on air pollution control device~~ **packed bed scrubber #1, packed bed scrubber # 2 and the composite mesh pad**; and for implementing corrective actions to address such malfunctions and periods of excess emissions.

Change 4:

Section D.1.6(c) has been changed as follows:

- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time of the plan initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10; ~~the air pollution control device, the add-on air pollution control device~~ **packed bed scrubber #1, packed bed scrubber # 2 and the composite mesh pad**, during similar malfunction or period of excess emissions events, and program for corrective action for such events.

Change 5:

Section D.1.6(f) has been changed as follows:

- (e) ~~(f)~~ The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM OAQ or Evansville EPA for the life of the tanks 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 **and packed bed scrubber #1, packed bed scrubber # 2 and the composite mesh pad** or until the tank is no longer subject to the provisions of 40 CFR 63.340.

Change 6:

Section D.1.7(a) has been changed as follows:

A performance test demonstrating initial compliance for tanks, 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10 was performed on June 16, 1997. It was determined that the average pressure drop across the composite mesh pad system was 1.00 inches of water and the average outlet chromium concentration is 0.0031 mg/dscm. Also during that test, it was determined that the average pressure drop across the pack bed scrubber system 1 (PB1) was $1.73 \pm$ inches of water and for the pack bed scrubber system 2 (PB2) was $1.7 \pm$ inches of water with total chromium concentration not exceeding 0.015 mg/dscm. ~~The inlet velocity for PB 1 was 670 fpm and 800 fpm for PB 2.~~ **The inlet velocity is 710 fpm and 800fpm respectively.**

Change 7:

Section D.1.8 has been changed as follows:

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6. ~~using the forms provided with this permit.~~

Change 8:

To be consistent, the changes made to the facility description in Section D were also made to Section A.2. It now reads as the following:

One (1) Hard Chromium Electroplating Operation with a maximum cumulative rectifier capacity of 288,120,000 Ampere-hours consisting of:

Ten (10) hard chromium electroplating tanks, identified as Tanks #s 1 (**Rectifier 14: 2000 amps**), 2 (**Rectifier 15: 3000 amps**), 3 (**Rectifier 4: 8000 amps and Rectifier 5: 10,000 amps**), 4 (**Rectifier 6: 10,000 amps and Rectifier 7 8000 amps**), 5 (**Rectifier 8: 8000 amps**), 6 (**Rectifier 9: 10,000 amps**), 7 (**Rectifier 12: 8000 amps**), 8 (**Rectifier 13: 8000 amps**) , 9 (**Rectifier 11: 8000 amps**), and 10 (**Rectifier 10: 8000 amps**), equipped with two (2) packed bed scrubbers and one composite mesh pad scrubber. **Tanks 3 and 4 exhaust to PBS #1, tanks 1, 2, 5, 6, 7, 8, 9, and 10 exhaust to PBS #2. Both packed bed scrubbers exhaust to the common composite mesh pad.**

**City of Evansville Environmental Protection Agency
and
Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	Hard Chrome
Source Location:	510 Dresden, Evansville, Indiana 47710
County:	Vanderburgh
SIC Code:	3471
Operation Permit No.:	MSOP 163-11753-00152
Permit Reviewer:	Leslie J. Sams

The Evansville Environmental Protection Agency (EEPA) has reviewed an application from Hard Chrome relating to the operation of a chromium electroplating source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices and emission units and control devices that did not require permits under 326 IAC 2-1, but require permits under 326 IAC 2-5 and 326 IAC 2-6:

- (a) One (1) Hard Chromium Electroplating Operation with a maximum cumulative rectifier capacity of 288,120,000 Ampere-hours consisting of:
 - Ten (10) hard chromium electroplating tanks, identified as Tanks #s 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, equipped with two (2) packed bed scrubbers and one composite mesh pad scrubber.
- (b) One (1) Bryant natural gas boiler rated at 1.56 mmbtu/hr

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

There are no proposed new facilities at this source during this review process.

Existing Approvals

Hard Chrome has been operating under a City of Evansville Certificate of Operation.

STACK ID	OPERATION	HEIGHT (FEET)	DIAMETER (FEET)	FLOW RATE (ACFM)	TEMPERATURE (°F)
#s 1-10	Chrome plating tank	32.0	2.125	3800	90

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on January 12, 2001.

Emission Calculations

Chromium emissions (Single HAP) from the biggest chromium electroplating source in Indiana are less than ten (10) tons per year and Hard Chrome is a much smaller source in comparison. Therefore, no emission calculations were necessary for the chromium electroplating because the chromium emissions from this source will be less than ten (10) tons per year.

Tank Operation or Operating Time

Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts is considered operating time.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

POLLUTANT	POTENTIAL TO EMIT (TONS/YR)
PM 10	0.08
SO2	0.004
VOC	0.04
CO	0.14
NOx	0.65

HAPS	POTENTIAL TO EMIT (TONS/YR)
Chromium	< 10

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of each pollutant is less than 250 tons per year and the potentials to emit VOC and NOX are less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPS is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The existing source is subject to 326 IAC 20-8 but not subject to 326 IAC 2-5.5-1(b)(2), Registration, because the source is not a decorative coating plant. The source is a hard chromium electroplating source and the source emits less than major source levels (see (a) and (b) above). Pursuant to 326 IAC 2-6.1-2, which uses the applicability of 326 IAC 2-5.1-3 (a)(2)(A), the source is required to have an MSOP.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	POTENTIAL TO EMIT (TONS/YR)					
Process/facility	PM 10	SO2	VOC	CO	NOx	HAP
Bryant boiler	0.08	0.004	0.04	0.14	0.65	0
Chrome line tanks 1-10	0.00	0.00	0.00	0.00	0.00	<10

County Attainment Status

The source is located in Vanderburgh County.

POLLUTANT	STATUS
PM 10	Attainment
SO2	Attainment
NO2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Vanderburgh County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

POLLUTANT	POTENTIAL TO EMIT (TONS/YR)
PM 10	0.08
SO2	0.004
VOC	0.04
CO	0.14
NOx	0.65

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the potential to emit of the entire source after controls.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) VOC and NOX are less than 25 tons per year,
- (c) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (d) any combination of HAPS is less than 25 tons/year.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.
- (c) The hard chrome electroplating tanks, identified as Tanks 1-10, are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40

CFR 63, Subpart N, and 326 IAC 20-8-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-8-1, the tanks are subject to the following conditions:

- (a) The Permittee shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere from the tanks to exceed 0.015 milli-grams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air (6.6×10^{-6} grains per dry standard cubic foot (gr/dscf)).
- (b) An Operation and Maintenance Plan (OMP), in accordance with 40 CFR 63.342(f)(3) shall be prepared and maintained and shall specify the operation and maintenance criteria for the tanks, the composite mesh pad system/ packed bed scrubbers and monitoring equipment.
- (c) The Permittee shall submit summary reports to document the ongoing compliance status of the tanks using the Ongoing Compliance Status Report form. This report shall contain the information in 40 CFR 63.347(g)(3) that is applicable.
 - (1) This report must be completed semiannually on a calendar year basis, unless otherwise directed by IDEM, OAQ. The report shall be submitted within thirty (30) days after the end of each reporting period (which ends on June 30 and December 31, respectively) to the address listed in Section C - General Reporting Requirements.
 - (2) If there are any exceedances of the chromium air emission limit contained in Condition D.1.1, then quarterly reports shall be submitted until a request to reduce reporting frequency, according to the procedures of 40 CFR 63.347(g)(2), is approved.
- (d) Performance tests demonstrating initial compliance for the tanks were performed on June 16, 1997.
 - (1) The Permittee shall monitor and record the pressure drop across the composite mesh pad system/ packed bed scrubbers once each day that the corresponding tanks are in operation.
 - (2) The composite mesh pad system/ packed bed scrubber exhausting to the stack shall be operated within 1 inches of water column, the pressure drop value established during the initial performance tests, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests that may be conducted in the future.

State Rule Applicability - Entire Source

326 IAC 2-4.1

This chrome electroplating operation will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore this rule will not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Vanderburgh County and the potential to emit VOC and NOX is less than ten (10) tons per year. The potential to emit PM10 is less than one-hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Conclusion

The operation of this chromium electroplating source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 163-11753-00152.